begin to feel. This is partly due to the fact that the percentage of false positives and false negatives is at least 5 percent, but mainly because, for a number of practical reasons, mammography, at the present time at least, cannot serve as a mass screening method. Palpation, by the patient as well as the physician, thus is still our main line of defense, and is therefore an art which we should keep alive and cultivate as much as possible.

There is moreover the ever present problem of deciding what is merely an increase in density of a normal breast and what is a mass. Even completely normal tissue is occasionally by patients, and sometimes even by physicians, interpreted as a mass, usually when the lower, pendulous portion of a breast is examined with the thumb in front and the index and middle finger behind, whereby the mere thickness of the tissue grasped is the source of error.

The breast is unique in posing these dilemmas, and with such frequency, and because it is impractical and even not without hazard to perform mammography every time these problems arise, which is often several times in one year, they frequently have to be answered on the basis of clinical findings and judgment only.

When dealing with a suspected cyst, I agree that mammography, at least at the first presentation, is usually indicated, to confirm the diagnosis of fibrocystic disease, to closely evaluate the remainder of the breast tissue and, as far as the presenting mass is concerned, to confirm the clinical impression that the mass as a whole is a cyst and not one solid mass. The coexistence of a carcinoma with a cyst at the same time and in the same location would seem rather coincidental, and is in reality indeed extremely rare. The presence of a nonpalpable occult cancer, although of course not excluded, would seem even less likely.

There are, however, as mentioned above, a number of practical problems, which mammography cannot be expected to answer.

First of all there is after any aspiration the necessity of verifying that the mass has completely disappeared. If a mass does persist, a normal mammogram taken prior to aspiration obviously does not mean that the mass can be ignored.

Furthermore, when the area is rechecked after a few weeks, to see if reaccumulation of the cyst has taken place, it is clear that again only palpation can answer that question. Finally, if within several months another cyst, elsewhere in the breasts, presents itself, mammograms will generally not be taken again, and the question of a possible malignancy will therefore entirely have to be settled at the palpable level.

In summary, in spite of the truly valuable contributions of mammography to the detection of breast cancer, its findings always have to be supplemented with clinical observations; moreover, when dealing with cysts, and also during the routine evaluation of breasts, a number of practical questions arise which can be solved only by evaluating physical findings with the aid of expertise, experience and judgment.

These are faculties which are indeed not measurable and are rather subjective—which however does not make them synonymous with "guesswork."

WALTER P. H. DE GROOT, MD Seattle

## Surreptitious Knuckle Cracking

TO THE EDITOR: As a surreptitious knuckle cracker, I was intrigued by the article by Swezey and Swezey in the May issue of the JOURNAL (West J Med 122:377-379, May 1975).

It would seem, from the data obtained, that knuckle cracking may be a means of preventing degenerative arthritis of the metacarpal-phalangeal joints. Perhaps a study involving a larger group of subjects would help elucidate this point.

Conceivably, then, surreptitious knuckle cracking might be a healthful practice which would avoid "the chief morbid consequence of knuckle cracking" and should be generally encouraged.

PHILIP CHARNEY, MD South Lake Tahoe

## More on Laetrile

To the Editor: Despite well-meaning attempts to dissuade people from using Laetrile by using rational argument, nothing but failure can be expected from these efforts.

The use of coercive means to attempt to enforce these official points of view produces an unfortunate opposite effect. Cancer victims and their families almost universally respond by accusing organized government and organized medicine of conspiracy. The bumbling attempts to present a unified front contribute to this interpretation.

By making Laetrile into "forbidden fruit" this

policy of willful suppression expectedly produces motivation to circumvent these efforts and repeatedly confront representatives of these policies.

The enthusiasm for Laetrile would gradually waste away if it were permitted to be sold overthe-counter and the drug would end up gathering dust on back shelves.

Alas, with the encrustation of attitudes and official policies, I fear that attachment to these methods is too strong to permit a rational and effective tactic of de-regulation and benign ignoring of the drug.

However, for every action there is a reaction and since "it takes two to tango," no end to the controversy may be seen at this time.

TOD H. MIKURIYA, MD Berkeley

## **Renal Imaging and Pyelonephritis**

To the Editor: There has been considerable interest in the possibility of establishing an earlier diagnosis of acute pyelonephritis using nuclear imaging techniques. We have performed studies with renal cortical imaging agents (99m Tc-dimercaptosuccinic acid [DMSA] and 99m Tc-glucoheptonate [GHA]) as well as 67-gallium citrate as described in a recent article by Kessler et al (Kessler WO, Gittes RF, Hurwitz SR, et al: Gallium-67 scans in the diagnosis of pyelonephritis. West J Med 121:91-93, Aug 1974).

It has become apparent that renal localization of 67-gallium citrate occurs in a variety of disease entities as well as in some normal patients. Explanations for this are poorly documented but appear to be related to several factors, only one of which is acute suppurative disease. The *normal* excretory pattern for 67-gallium citrate includes a significant renal excretion in the first 12 hours; patients with altered serum iron binding capacity appear to have increased renal uptake of 67-gal-

lium citrate<sup>1</sup> as do patients with a variety of neoplasms involving the kidneys.

Prompted by the Kessler article we reviewed 127 consecutive patients in our laboratory who had 67-gallium citrate scans for nongenitourinary tract problems. Seven patients (5 percent) showed well defined renal uptake of the material, one with unilateral localization. These patients' records were reviewed and one of the seven had symptoms or laboratory evidence of acute pyelonephritis.

Shortly after completing this review Frankel<sup>2</sup> reported renal uptake of 67-gallium citrate in 1.7 percent of 2,000 patients. In 13 autopsied cases 2 (15.5 percent) had normal kidneys, 9 (69 percent) had tumor involvement and only 2 (15.5 percent) had renal inflammatory disease.

Renal imaging with 67-gallium citrate, as well as with renal cortical agents (as suggested by Davies<sup>3</sup> with 197 Hg-chlormerodin), seems to be of value in the early diagnosis of acute pyelonephritis. It would appear, however, that we must proceed with caution in advocating studies that produce a significant number of "false positives." Exclusion of other causes for renal uptake of 67gallium citrate is often difficult, and the possibility of performing further costly and more invasive procedures in normal patients should be borne in mind when interpreting this study. While Kessler and co-workers are to be congratulated for their application of this study to a difficult clinical problem, to conclude that the technique is "eminently useful in the diagnosis of acute pyelonephritis" seems a bit premature and possibly misleading in view of the frequency of renal uptake from other causes.

> HIRSCH HANDMAKER, MD Director, Nuclear Medicine Service ROSE ANN ANDERSON, BS Nuclear Medicine Technologist Children's Hospital of San Francisco

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